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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,613	02/18/2004	Thomas Alexander Horn	CM2603CQ	2691

27752 7590 06/28/2006

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
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CINCINNATI, OH 45224

EXAMINER
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LAVINDER, JACK W

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/781,613

Applicant(s)

HORN ET AL.

Examiner

Jack W. Lavinder

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-12 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumpf, 3687754.

Stumpf, 3687754, discloses a loop member (see abstract) capable of being used in a mechanical hook and loop fastener. The loop member comprising a non-woven web (14) attached to a tessellating pattern of adhesive (col. 13, lines 60-end, figures 4, 5, and 31), i.e., a first set of sinusoidal lines of adhesive extending parallel to one another and a second set of sinusoidal lines of adhesive criss-crossing the first set (80, figure 31). Stumpf discloses that the bond lines and non-woven material can be assembled into a roll and later used (col. 6, lines 16-22) in the formation of another product.

The applicant has amended the independent claims to include the limitation "wherein said pattern includes at least 3.2 pattern elements per square centimeter." Stumpf fails to disclose the specific density of the pattern elements. However, the density of the pattern elements, i.e., the amount of adhesive lines applied to the loop member, is considered a design effect variable. The increase or decrease in the density of the pattern elements results in an expected increase or decrease in the

number of fibers being adhered to the loop and results in an increase or decrease in the number of fibers adhered to themselves in Stumpf's final product. It would have been an obvious design choice to increase or decrease the number of pattern elements to increase or decrease the bond strength of Stumpf's final product in order to vary the strength of the product for different uses.

3. Claims 1, 3, 4, and 7-11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over King, 5595567.

Regarding claim 1, King discloses a loop member (37) bonded to a backing member (31) via a criss-cross pattern of adhesive (figures 2 and 3) lines: continuous or non-continuous, straight or curved (column 8, lines 17-25). King fails to disclose the specific density of pattern elements being 3.2 pattern elements per square centimeter. However, the density of the pattern elements, i.e., the amount of adhesive lines applied to the loop member, is considered a design effect variable. The increase or decrease in the density of the pattern elements results in an expected increase or decrease in the number of fibers being adhered to the loop and results in an increase or decrease in the number of fibers adhered to themselves. It would have been an obvious design choice to increase or decrease the number of pattern elements to increase or decrease the bond strength of King's final product in order to vary the product for different uses, i.e., different peel-off strengths.

4. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over King, 5595567 in view of Stumpf, '754.

Regarding claims 2 and 12, King fails to disclose a tessellating pattern of intersecting sinusoidal waves of adhesive. Stumpf discloses a tessellating pattern of adhesive lines on a non-woven web material.

Stumpf, 3687754, discloses a loop member (see abstract) capable of being used in a mechanical hook and loop fastener. The loop member comprising a non-woven web (14) attached to a tessellating pattern of adhesive (col. 13, lines 60-end, figures 4, 5, and 31), i.e., a first set of sinusoidal lines of adhesive extending parallel to one another and a second set of sinusoidal lines of adhesive criss-crossing the first set (80, figure 31). Stumpf discloses that the bond lines and non-woven material can be assembled into a roll and later used (col. 6, lines 16-22) in the formation of another product.

It would have been an obvious design choice to substitute a sinusoidal wave pattern of adhesive, as taught by Stumpf, in place of King's straight/curve line pattern of adhesive, since the specification fails to clearly and specifically state the criticality of having a sinusoidal pattern over a straight/curve pattern and it appears that either pattern of adhesive works equally as well as the other.

#### ***Allowable Subject Matter***

5. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments filed 1/23/2006 have been fully considered but they are not persuasive. The applicant states two positions in attacking the 103 rejections based on Stumpf. The first is "Optimization of ranges". The examiner is not proffering an "optimization of ranges" rejection. Rather, the 103 rejections are based on design choice of a result effective variable, which is the second position offered in response to the rejection. Therefore, this response is directed to applicant's second position.

The applicant states, starting at the bottom of page 5 of their remarks, that the criticality of the limitation, i.e., 3.2 pattern elements per square centimeter, is to provide more anchored fibers without a proportional increase in the percentage of overall bonded area. From reading the applicant's specification, it appears that the criticality of the anchored fibers without a proportional increase in the percentage of overall bonded area is the result of the shape of the contour lines and not the density of the pattern elements per square centimeter. The density of the pattern elements is a mere design effect variable, i.e., the optimization of the peel-off strength of the fastener. A designer could increase or decrease the density of the pattern elements in order to vary the amount of anchored fibers, which in turn varies the peel-off strength of the fastener.

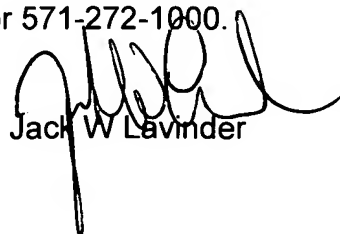
Stumpf discloses that the patterns of adhesive and amount of adhesive applied is a design effect variable (column 3, lines 41-57). Therefore, it would have been an obvious design choice to vary the amount of adhesive applied to the material, i.e., to vary the density of the pattern element, which is directly proportional to the amount of adhesive applied.

The applicant argues, with respect to the King in view of Stumpf rejections, that there is no motivation to combine. The motivation, which would be gleaned from the references, is to vary the strength characteristics of the fastener by varying the pattern of adhesive used on the non-woven web material. This is taught in both references. The pattern and amount of adhesive applied to the non-woven web will vary the peel-off and strength characteristics of the fastener.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack W. Lavinder whose telephone number is 571-272-7119. The examiner can normally be reached on Mon-Friday, 9-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jack W. Lavinder

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Primary Examiner  
Art Unit 3677

6/19/06